

Title (en)

METHOD OF MANUFACTURING HIGH TEMPERATURE LAMINATED STATOR CORES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON HOCHTEMPERATURLAMINIERTEN STATORKERNEN

Title (fr)

PROCÉDÉ DE FABRICATION DE NOYAUX DE STATOR FEUILLETÉS POUR HAUTES TEMPÉRATURES

Publication

**EP 3051664 A1 20160803 (EN)**

Application

**EP 16152838 A 20160126**

Priority

US 201514609752 A 20150130

Abstract (en)

Embodiments of laminated stator cores (66) suitable for usage in high temperature applications are provided, as are embodiments of methods (10) for manufacturing high temperature laminated stator cores. In one embodiment, the method includes obtaining (12) a plurality of coated laminates (16) each comprising a laminate over which a coating precursor layer (34) is formed. The coating precursor layer contain inorganic dielectric particles having a softening point. The plurality of coated laminates are arranged (40) in a laminate stack (58), which is then fired (54) at temperatures equal to or greater than the softening point of the inorganic dielectric particles. During firing, a compressive force is applied to the laminate stack sufficient to consolidate the inorganic dielectric particles into a plurality of coherent interlaminar dielectric layers (72) electrically insulating and bonding together the plurality of coated laminates as the high temperature laminated stator core.

IPC 8 full level

**H02K 1/04** (2006.01)

CPC (source: EP US)

**H01F 41/0233** (2013.01 - EP US); **H02K 1/04** (2013.01 - EP US); **H02K 1/18** (2013.01 - US); **H02K 15/02** (2013.01 - EP US); **H02K 15/12** (2013.01 - US); **H01F 1/18** (2013.01 - EP US); **H02K 2201/09** (2013.01 - US); **Y10T 29/49009** (2015.01 - EP US)

Citation (applicant)

US 201313801476 A 20130313

Citation (search report)

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